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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,079	09/11/2003	Volker Thewes	2002DE133	5893

7590 05/13/2005

Clariant Corporation
Industrial Property Department
4000 Monroe Road
Charlotte, NC 28205

EXAMINER

THEXTON, MATTHEW

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 05/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/660,079

Applicant(s)

THEWES ET AL

Examiner

Matthew A. Thexton

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☒ Claim(s) 17-19 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date two sheets.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Objections

Claim 5 is objected to because of the following informalities: In line 4 of claim 5, after "n-dodecylene" is a semicolon. This should be a comma. Appropriate correction is required.

Claim 10 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The members of the group are not carbohydrates.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 13 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13 concludes with the word "dicyandiamides." This is not understood since dicyandiamide is a particular unique compounds. For purposes of examination, this is interpreted to mean the compound, dicyandiamide.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-15 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. A "coating" per se cannot be patented because it does not exist by itself; once it is removed from that which it coats it ceases to be a coating and becomes a different entity, such as a film/mixture/composition/.../substance/material. One may patent a film/mixture/composition/.../substance/material 'suitable for use as a coating.' Alternatively, one may patent a coated substrate/thing/.../article.

For purposes of examination, the claims are interpreted as "A fire-protection coating material capable of forming an insulating layer, comprising...."

Claims Analysis

Claims 1-5 are directed to coating materials comprising a specified phosphinate, a specified diphosphinate, a mixture of said phosphinate and said diphosphinate, a polymer of said phosphinate, a polymer of said diphosphinate, and a mixture of said polymers. Claims 16 and 17 depend from claim 1 and further require an article comprising an insulating layer comprising the material of claim 1.

Claims 6-15 are directed to coating materials comprising six components:

A) film-forming binder,

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- B) foam forming substance,
- C) carbon forming substance,
- D) blowing agent,
- E) at least one auxiliary or additive,
- F) aluminum diethylphosphinate (DEPAL);
- G) claim 15 further requires a seventh component, melamine polyphosphate.

Proportions are set forth in the independent claims 6 and 7. Claims 8-15 depend from claim 6 and further specify the components. Claims 18 and 19 depend from claim 6 and further require an article comprising an insulating layer comprising the material of claim 6.

35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections

Claims 1-5 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Simkin (US 4001034).

See column 1, lines 49-56. The reference discloses that zinc methylphenylphosphinate has been used in coatings, thus anticipating the indicated claims.

Citation of Pertinent Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Konig et al. (CA 2135385-A1) corresponds to DE 4218184-A1, which was cited by Applicant.

Schlosser et al. (US 6255371-B1) discloses phosphinates and mixtures thereof and mixed with melamine/phosphate compounds as flame retardant additives for thermoplastic molding plastics. There is no suggestion to employ such in coating mixtures.

Schlosser et al. (US 6547992-B1) discloses phosphinates and mixtures thereof and mixed with melamine/phosphate compounds as flame retardant additives for thermoplastic molding plastics. There is no suggestion to employ such in coating mixtures.

Thewes et al. (US 6642284-B2) discloses intumescent flame retardant coating materials in which the blowing agent and foam forming substance is melamine polyphosphate. There is no suggestion to employ salts of phosphinate or diphosphinate.

Pirig et al. (US 6251961-B1) discloses intumescent flame retardant coating materials in which the blowing agent is melamine polyphosphate and the foam forming substance is ammonium salts of phosphoric or polyphosphoric acid. There is no suggestion to employ salts of phosphinate or diphosphinate.

Allowable Subject Matter

Claims 17-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 6-19 would be allowable if rewritten to overcome the 35 USC 101 and 112 rejections.

Statement of Reasons for Indication of Allowable Subject Matter

The following is a statement of reasons for the indication of allowable subject matter: There are multiple references which disclose intumescent flame retarding coating materials comprising the first five components of Applicant's claims 6-19. However, there is no suggestion in the prior art considered to employ aluminum diethylphosphinate for any purpose in coating materials having a film-forming binder.

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Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew A. Thexton whose telephone number is 571-272-1125. The examiner can normally be reached on Monday-Friday, 9:30 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasudevan S. Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M. A. Thexton

Matthew A. Thexton
Primary Examiner
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